



06-17-03

AP  
3711

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

#10  
6/16/03  
Bross

APPLICATION NO.: 09/782,782  
FILED: February 13, 2001  
APPLICANTS: Christopher Cavallaro, Ryan W. Bosanko, and  
Edmund A. Hebert  
TITLE: THIN-LAYER-COVERED MULTI-LAYER GOLF BALL  
GROUP ART UNIT: 3711  
EXAMINER: Alvin Hunter  
ATTY. DOCKET NO.: B01-07

RECEIVED  
JUN 19 2003  
TECHNOLOGY CENTER R3700

REPLY TO EXAMINER'S ANSWER UNDER 37 C.F.R. § 1.193

REMARKS

This Reply to Examiner's Answer is being submitted in response to the Examiner's Answer, mailed April 16, 2003, which resulted from Appellants' Appeal Brief that was filed on February 5, 2003.

On page 4 of the Examiner's Answer, the Examiner states that "the main concern of the invention is to have an outer cover with a Shore D hardness of greater than 50 as stated in the Summary of the Invention on pages 7-9 of the specification." The Examiner goes on to state that "[t]he invention is clearly directed to a golf ball having an outer cover hardness of any Shore D hardness greater than about 50, which was in original claim 1..." and correctly notes that claim 1 "...was amended to avoid the anticipation by Hayashi et al." Appellants respectfully note that it is the *claimed invention* that is at issue – any broader disclosure in Appellants' specification indicating a 'concern' of the invention is irrelevant to an obviousness rejection.

The Examiner appears to be relying solely on the term “about” to overcome the Hayashi teaching of a *softer* outer cover layer having a Shore D hardness of 35 to 53, one quite contrary to the *harder* outer cover layer of the present invention, one having a Shore D hardness of greater than about 56. Appellants are directed by the Examiner to the bottom of column 5 where Hayashi explains how golf ball characteristics, *within the confines of the invention*, may be varied. Appellants do not disagree with this assertion. Hayashi does indeed disclose that the outer cover must be softer than the inner cover and has a Shore D hardness of 35 to 53. See U.S. Patent No. 6,248,027 (issued June 19, 2001) at column 5, lines 58-60. Further, Hayashi clearly states that when “the outer cover is made in this manner, the spin performance upon approach shots is improved and the hitting feel upon approach shots and putting becomes soft.” See *Id.* at column 5, lines 63-65. As such, while Appellants agree that one of ordinary skill in the art, reading Hayashi, might vary the cover hardness, they certainly would not be inclined to go outside the specific constraints clearly set forth in this reference. Appellants can think of no scenario in which one of ordinary skill in the art reading Hayashi, even improperly using Appellants’ claims as a template, would be inclined to construct an outer cover having a higher Shore D than taught by Hayashi.

Additionally, on page 6 of the Examiner’s Answer, the Examiner, relying on *Titanium Metal Corporation. of America v. Banner*, states that “prima facie obviousness exists where the claimed ranges and the prior art do not overlap but are close enough that one skilled in the art would have expected them to have the same properties.” One of ordinary skill in the art of golf ball manufacture would know that, all other things being equal, a golf ball having an outer cover with a Shore D hardness of 53 would not have the same, or even similar, properties as one having an outer cover hardness of 57 (an example greater than about 56 Shore D). This change in cover hardness will result in a golf ball having at least 200 rpm *lower* driver spin and, even more importantly, 300-400 rpm *lower* wedge spin. Appellants note that Hayashi is specifically directed to a golf ball that will improve (*i.e.*, increase) spin performance and feel for approach shots, ones typically hit with a wedge. See *Id.* at column 5, lines 63-65. Moreover, the increase in cover hardness would further result in an approximately 5,000-10,000-psi-increase in flexural modulus of the cover material. This increase in flexural modulus translates directly to an increase in golf ball coefficient of restitution (“COR”). The skilled golf ball artisan would certainly know that an increase in golf ball COR will result in increased distance. For at least the

above reasons, Appellants respectfully submit that the Examiner's assertion that 53 Shore D is "about" 56 Shore D *and* would result in a golf ball having the same properties as that in Hayashi, is incorrect.

On page 7 of the Examiner's Answer, the Examiner alleges that Appellants have misinterpreted the teaching of Hayashi. The Examiner directs Appellants to column 5, lines 63-65, where the reference states that when "the outer cover is made in this manner [outer cover softer than inner cover and having a Shore D hardness of 35 to 53], the spin performance upon approach shots is improved [increase in spin] and the hitting feel upon approach shots and putting becomes soft." See *Id.* at column 5, lines 63-65. The Examiner claims that the skilled artisan, reading this section of Hayashi, would solely be motivated to have an outer cover softer than an inner cover but would not be precluded to increase cover hardness. The Examiner is mistaken. As set forth above, increasing cover hardness would clearly result in a golf ball having *decreased* approach shot spin performance and result in a *harder* hitting feel – one of ordinary skill in the art would have no motivation, reading Hayashi, to look to a Appellants' harder covers because Hayashi teaches away from harder covers.

#### CONCLUSION

In accordance with the authority set forth above, and for the facts and reasons fully developed herein and in Appellants' Appeal Brief, Appellants respectfully request that the decision of the Examiner be reversed in its entirety.

Respectfully submitted,



Date: June 16, 2003

Troy R. Lester (Reg. No. 36,200)  
Acushnet Company  
333 Bridge Street  
Fairhaven, MA 02719  
(508) 979-3534